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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,581	07/18/2003	Tae-Hun Kim	25611-000069/US	2108
· ·	590 05/18/2004		EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910		_	CLARK, JASMINE JHIHAN B	
RESTON, VA			ART UNIT	PAPER NUMBER
	*	× 1	2815	
	•		DATE MAIL ED: 05/18/200/	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/621,581	KIM, TAE-HUN				
Office Action Summary	Examin r	Art Unit	,			
	Jasmine J Clark	2815				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespond nce address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply of the period for reply is specified above, the maximum statutory period with the period for reply within the set or extended period for reply will, by statute, any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONF	nely filed s will be considered timely. the mailing date of this communication 0. (35 U.S.C. & 133)	n.			
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	action is non-final.					
3) Since this application is in condition for allowan	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.		·				
4a) Of the above claim(s) is/are withdraw	n from consideration.					
5) Claim(s) is/are allowed.		•				
6) Claim(s) 1-18 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.	• • • • • • • • • • • • • • • • • • • •				
Application Papers						
9)☐ The specification is objected to by the Examiner	·					
10) The drawing(s) filed on is/are: a) acce		- - - - - - - - -				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction	•		d).			
11)☐ The oath or declaration is objected to by the Exa		•	,			
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign r	priority under 35 H.S.C. & 110(a)	(d) or (f)				
a)⊠ All b)□ Some * c)□ None of:	ononly under 55 C.C. 8 119(a)	·(u) or (i).				
1. ⊠ Certified copies of the priority documents	have been received					
2. Certified copies of the priority documents	•	on No.				
3. Copies of the certified copies of the priori	• •					
application from the International Bureau	•	3 .				
* See the attached detailed Office action for a list of	f the certified copies not received	d.				
		:				
Attachment(s)	· <u> </u>					
Notice of References Cited (PTO-892)	4)	PTO-413)				
(2) ☐ Notice of Draitsperson's Patent Drawing Review (P10-946)  (3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 7/18/03.		atent Application (PTO-152)				
Patent and Trademark Office						

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Cho (US 6,087,718).

Cho shows a structure of a device (see Fig. 2) comprising a leadframe 3 having a leadframe pad, the leadframe pad having an upper surface and a lower surface; a first chip 5 having a plurality of bonding pads 4 (see column 2, line 41) arranged on a first active surface; a first adhesive member 8 arranged between a portion of the first active surface and a portion of the lower surface of the leadframe pad, the first adhesive member attaching the first chip 5 to the leadframe; a second chip 7 having a plurality of bonding pads 7 formed on a second active surface and a backside surface opposite the second active surface; a second adhesive member arranged between a portion of the backside surface and a portion of the upper surface of the leadframe pad, the second adhesive member attaching the second chip 7 to the leadframe pad.

Concerning claims 2 and 3, wherein the leadframe pad includes a central opening; and the first chip is mounted to the lower surface of the leadframe pad in a manner that exposes at least a portion (each in claim 3) of the first plurality of bonding pads within the central opening, please see Fig. 2.

Concerning claim 4, wherein the second adhesive member is formed from a combination of an adhesive tape member and a cured liquid adhesive, please see column 2, lines 55+.

Concerning claims 5-18, please see the above discussion and see columns 2 and 3.

## References Cited

2. Tanaka et al. (US 6,265,762 B1), Chen (US 6,077,724), Lee et al. (US 6,087,722), Ball (US 6,080,264), and Yang (US 6,291,881 B1) show a structure of device with first and second chips attaching to a leadframe with adhesive layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine J Clark whose telephone number is (571) 272-1726. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jjbc/05/13/04

JASMINE CLARK
PRIMARY EXAMINER